IN THE CLAIMS

The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1. (currently amended) A power and data transfer assembly, comprising:

a ~~body,~~ body;

first and second power conductors disposed in the body and configured to conduct two phases of three-phase power to a device, and a third power conductor disposed in the body configured to conduct data signals and a third phase of three-phase power to the device;

a neutral conductor disposed in the body and configured to return power and conduct data signals in cooperation with the third conductor; and

a disconnect configured to interrupt power through the first and second power conductors;

wherein the third power conductor and the neutral power conductor are configured to maintain one phase of three-phase power and data signals to the device upon interruption of power through the first and second conductors.

2. (original) The assembly as recited in claim 1, wherein the disconnect comprises a switch.

3. (original) The assembly as recited in claim 1, wherein the disconnect comprises circuit protection circuitry.

4. (original) The assembly as recited in claim 3, wherein at least a portion of the circuit protection circuitry is physically disengageable from the body.

5. (original) The assembly as recited in claim 3, wherein the circuit protection circuitry comprises a circuit breaker configured for local reset.

6. (original) The assembly as recited in claim 3, wherein the circuit protection circuitry is remotely operable.

7. (original) The assembly as recited in claim 1, further comprising an indicator configured to indicate a status of the disconnect.

8. (original) The assembly as recited in claim 1, further comprising a set of tap conductors coupled to respective power conductors and to the neutral conductor and configured to conduct three-phase power and the data signals to a second device.

9. (original) The assembly as recited in claim 8, further comprising a plurality of sets of tap conductors.

10. (currently amended) The assembly as recited in claim 8, wherein the disconnect is configured to selectively interrupt only power ~~only~~ through at least one of the ~~branch~~ tap conductors.

11. (original) The assembly as recited in claim 1, wherein the disconnect is integrated with respect to the body.

12. (original) The assembly as recited in claim 1, wherein the disconnect comprises a lock-out mechanism.

13. (original) A power and data transfer assembly, comprising:

first and second power conductors disposed in a body and configured to conduct two phases of three-phase power to a device, and a third power conductor disposed in the body and configured to conduct a third phase of three-phase power and data signals to the device;

a neutral conductor disposed in the body and configured to transmit data signals in cooperation with the third conductor; and

a set of tap conductors disposed on the body and coupled to respective power conductors and to the neutral conductor and configured to provide three-phase power and the data signals to a second device.

14. (original) The assembly as recited in claim 13, further comprising a disconnect disposed in the body and configured to interrupt at least one phase of three-phase power.

15. (currently amended) The assembly as recited in claim 14, wherein the disconnect is configured to selectively interrupt power ~~only through at least one of the tap conductors~~ to the second device while permitting power transmission to the first device.

16. (original) The assembly as recited in claim 13, further comprising a plurality of branch conductor sets configured to conduct three-phase power and data signals to respective devices.

17. (original) The assembly as recited in claim 16, further comprising a disconnect disposed on a tap conductor and configured to disconnect at least two phases of three-phase power to at least one of the respective devices.

18. (original) The assembly as recited in claim 13, further comprising a data port configured to output or input the data signals.

19. (original) The assembly as recited in claim 18, wherein the data port is configured to wirelessly transmit data.

20. (original) The assembly as recited in claim 13, further comprising an indicator configured to indicate a status of a conductor or of a device coupled to a conductor.

21. (original) The assembly as recited in claim 13, further comprising diagnostic circuitry disposed in the body and configured to determine a system condition.

22. (original) The assembly as recited in claim 21, wherein the diagnostic circuitry determines a system condition in response to the data signals.

23. (original) The assembly as recited in claim 21, wherein the diagnostic circuitry applies data signals to the conductors to verify connectivity.

24. (original) The assembly as recites in claim 21, wherein the diagnostic circuitry includes a network adapter for interfacing with a non-network capable device.

25. (original) The assembly as recited in claim 13, further comprising an indicator configured to indicate a system condition.

26. (original) A power and data transfer assembly, comprising:

a body;

a plurality of primary power conductors disposed in the body and configured to conduct three-phase power to a device;

a secondary power conductor disposed in the body and configured to conduct secondary power and data signals to the device;

an auxiliary conductor disposed in the body and configured to conduct data signals to the device in cooperation with the secondary power conductor;

a set of tap conductors respectively coupled to the primary power conductors, secondary power conductor, and to the auxiliary conductor, and configured to conduct the three-phase power, the secondary power and the data signals to a second device; and

a disconnect configured to interrupt three-phase power to the second device while maintaining the secondary power and the data signals to the second device via the secondary power conductor and the auxiliary conductor.

27. (original) The power and data assembly as recited in claim 26, wherein the disconnect comprises circuit protection circuitry.

28. (original) The power and data assembly as recited in claim 26, wherein the disconnect comprises a switch.

29. (original) The power and data assembly as recited in claim 26, further comprising an indicator configured to indicate a status of the disconnect.

30. (original) The power and data assembly as recited in claim 29, wherein the indicator comprises an LED.

31. (currently amended) A power and data transfer system, comprising:

a data source configured to provide data signals in accordance with a data communications protocol;

a device powered by one phase of three-phase power and configured to receive the data signals; and

a power and data transfer assembly configured to ~~couple~~ facilitate electrical communication from the data source and a three-phase power source to the device, the power and data transfer assembly comprising:

a body;

first and second power conductors disposed in the body and configured to conduct two phases of three-phase power, and a third power conductor configured to conduct a third phase of three-phase power and data signals to the device;

a neutral conductor configured to conduct data signals in cooperation with the third conductor; and

a set of tap conductors each coupled to the power conductors and to the neutral conductor and configured to conduct three-phase power and data signals to a second device.

32. (original) The system as recited in claim 31, further comprising a disconnect coupled to the first and second conductors and configured to selectively interrupt two phases of three-phase power to the second device.

33. (original) The system as recited in claim 32, wherein the disconnect is configured to interrupt power only through the tap conductors.

34. (original) The system as recited in claim 32, wherein the power and data assembly comprises an indicator configured to indicate a status of the disconnect.

35. (original) The system as recited in claim 32, further comprising a plurality of sets of tap conductors configured to conduct three-phase power and data signals to respective devices.

36. (original) The system as recited in claim 32, wherein the power and data transfer assembly comprises an indicator configured to indicate a status of at least one of the first and second devices.

37. (original) The system as recited in claim 32, further comprising an indicator configured to indicate an operative status of at least one conductor.

38. (original) The system as recited in claim 32, wherein the power and data transfer assembly comprises an indicator configured to indicate a status of the system electrically upstream of the assembly.

39. (original) The system as recited in claim 32, wherein the power and data transfer assembly comprises an indicator configured to indicate a status of the system electrically downstream of the assembly.

40. (original) The system as recited in claim 32, wherein the power and data transfer assembly comprises diagnostic circuitry configured to provide a second data signal indicative of a system condition.

41. (original) A method of transferring power and data, comprising:

applying two phases of three-phase power to a device via first and second power conductors disposed in a body;

applying a third phase of three-phase power and data signals to the device via a third power conductor disposed in the body;

applying data signals to the device via a neutral conductor disposed in the body in cooperation with the third power conductor; and

applying three-phase power and the data signals to a second device via a set of tap conductors respectively coupled to the power conductors and the neutral conductor and disposed in the body.

42. (currently amended) The method as recited in claim 41, further comprising interrupting two phases of three-phase power to the second device while maintaining ~~maintain~~ one phase of power and the data signals to the second device via the third power conductor and the neutral conductor.

43. (original) The method as recited in claim 41, further comprising coupling to earth ground via an earth ground conductor.

44. (currently amended) The method as recited in claim 41, wherein the data signals include signals in accordance with ~~a predetermined~~ an industrial data communications protocol.

45. (currently amended) The method as recited in 44, wherein the data signals include signals in accordance with ~~a predetermined~~ an override protocol in addition to the data communications protocol.

46. (original) A method of transferring power and data, comprising:

applying three-phase power to a first device via a plurality of primary power conductors disposed in a body;

applying one phase of the three-phase power and data signals to the first device via a secondary power conductor disposed in a body;

applying data signals to the first device via a neutral conductor disposed in the body in cooperation with secondary power conductor;

applying three-phase power and the data signals to a second device via a set of tap conductors respectively coupled to the primary, secondary and neutral conductors; and

interrupting two phases of three-phase power to the second device while maintaining one phase of three-phase power and data signals to the second device and while maintaining three-phases of power and data signals to the first device.

47. (original) The method as recited in claim 46, further comprising coupling the first and second devices to earth ground via an earth ground conductor disposed in the body.

48. (currently amended) The method of claim 46, wherein the data signals include signals in accordance with ~~a predetermined~~ an industrial data communications protocol.

49. (currently amended) The method of claim 46, wherein the data signals include signals in accordance with ~~a predetermined~~ an override protocol in addition to the data communications protocol.